

**REMARKS**

In response to the Office Action dated November 27, 2007, claims 1 and 16 are amended, claims 2 and 17 are cancelled without prejudice, and claim 18 is new. Claims 3 and 7 were previously cancelled without prejudice. Claims 1, 4-6, 8-16, and 18 are active. No new matter has been added. The amendments are supported, at a minimum, by FIGS. 1, 2 and 13. Claims 1, 16, and 18 are the only independent claims.

**Claims 1, 2, 4-6, 8-13, 16, and 17 were rejected under 35 U.S.C. § 103(a)** as allegedly unpatentable over Wildenthal (GB 1326665) in view of Mennie (U.S. 2007/0095630). Applicants submit that this rejection is moot with respect to cancelled claims 2 and 17. Applicants traverse this rejection.

**Claim 14 was rejected under 35 U.S.C. § 103(a)** as being unpatentable over Wildenthal (GB 1326665) in view of Mennie (U.S. 2007/0095630) and further in view of Takarida (EP 0668576). Applicants traverse this rejection.

**Claim 15 was rejected under 35 U.S.C. § 103(a)** as being unpatentable over Wildenthal (GB 1326665) in view of Mennie (U.S. 2007/0095630) and Takarida (EP 0668576) and Lieu (US 6407810). Applicants traverse this rejection.

Independent claim 1 recites, in part, “**wherein the ultraviolet light detection elements and the fluorescence detection elements are disposed alternately with each other in a linear arrangement.**”

In order to establish *prima facie* obviousness under 35 U.S.C. § 103(a), all the claim limitations must be taught or suggested. Further, “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.

3d 977, 988 (Fed. Cir. 2006). At a minimum, the cited prior art references do not disclose (expressly or inherently) or suggest the above recited element.

The Office Action, at page 3, admits that Wildenrath does not explicitly disclose a plurality of measurement elements, and asserts that Mennie, at FIG. 17 and paragraphs 82, 107, and 121 allegedly discloses the use of a plurality of measurement units that simultaneously measure a currency characteristic, including intensity of fluorescent light, at multiple different positions in order to detect patterns in currency. Specifically, paragraph 107 states:

[0082] With regard to optical sensing, a variety of currency characteristics can be measured such as detection of density (U.S. Pat. No. 4,381,447), color (U.S. Pat. Nos. 4,490,846; 3,496,370; 3,480,785), size including length and width, thickness (U.S. Pat. No. 4,255,651), the presence of a security thread (U.S. Pat. No. 5,151,607) and holes (U.S. Pat. No. 4,381,447), and other patterns of reflectance and transmission (U.S. Pat. Nos. 3,496,370; 3,679,314; 3,870,629; 4,179,685), the detection of security threads and characteristics of security threads such as location, color, (e.g., under normal and/or ultraviolet illumination), thread material construction, covert thread characteristics such as coating, bar codes, microprinting, etc. Color detection techniques may employ color filters, colored lamps, and/or dichroic beamsplitters (U.S. Pat. Nos. 4,841,358; 4,658,289; 4,716,456; 4,825,246, 4,992,860 and EP 325,364). Furthermore, optical sensing can be performed using ultraviolet light to detect reflected ultraviolet light and/or fluorescent light including detection of patterns of the same. Furthermore, optical sensing can be performed using infrared light including detection of patterns of the same. An optical sensing system using ultraviolet light is described in the assignee's co-pending U.S. patent application Ser. No. 08/317,349, filed Oct. 4, 1994, and incorporated herein by reference, and described below.

[0107] For example, the staggered arrangement of sensors 366 depicted in FIG. 14 may comprise two scanheads, each comprising a linear array of sensors (FIG. 17b, scanheads 367a, 367b). For example sensors 366a-d may be arranged in a first scanhead and sensors 366e-g may be arranged in a second scanhead. Other arrangements are illustrated in FIGS. 17c and 17d which include scanheads 369 and 371a and 271b. These scanheads of multiple sensors may comprise, for example, magnetoresistive sensors as described above.

[0121] FIGS. 20-24 are flowcharts illustrating several methods for using optical, magnetic, and security thread information to denominate and authenticate bills. These methods may be employed with the various characteristic information

detection techniques described above including, for example, those employing visible and ultraviolet light and magnetics including, for example, those for detecting various characteristics of security threads. Additionally, the currency handling device 10 with the magnetic scanhead 400 can scan a currency bill and generate a magnetic image of the bill. The magnetic image can be compared to master magnetic images obtained from known genuine bills stored in a memory of the device 10 to evaluate the currency bill.

Thus, FIG. 17b of Mennie appears to disclose merely a first scanhead 367a with a first set of sensors, and a second scanhead 667b with a second set of sensors.

However, Mennie does not teach or suggest, “**wherein the ultraviolet light detection elements and the fluorescence detection elements are disposed alternately with each other in a linear arrangement,**” as required by amended claim 1.

Thus, at a minimum, the combination of Wildenrath and Mennie fails to teach or suggest the forgoing element, and therefore claim 1 is allowable over the cited prior art references.

Additionally, claim 16 similarly recites that the ultraviolet and fluorescent detection elements are disposed alternately in a linear arrangement. Therefore, Applicants submit that independent claim 16 is allowable for at least the same reasons as independent claim 1.

Under Federal Circuit guidelines, a dependent claim is allowable if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987).

Thus, as independent claim 1 is allowable for the reasons set forth above, it is respectfully submitted that dependent claims 4-6, and 8-15 are allowable for at least the same reasons.

New independent claim 18 recites, in part, “the ultraviolet light detection elements are arranged in a first row, the fluorescence detection elements are arranged in a second row, the first

row is parallel with the second row and not co-linear with the second row, and the optical axis of at least one ultraviolet light detection element and the optical axis of at least one fluorescent detection element intersect with each other on the paper."

Applicants submit that none of the cited art discloses the above recited arrangement of detection elements. For example, FIG. 17 b of Mennie does not specify the above recited element of claim 18. Further, FIG. 3 of Wildenrath does not disclose the above recited element of claim 18.

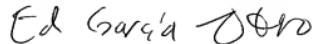
Thus, Applicants submit that independent claim 18 is allowable over the cited prior art references.

Accordingly, it is urged that the application, as now amended, is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Eduardo Garcia-Otero  
Registration No. 56,609

600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005-3096  
Phone: 202.756.8000 KEG/EG:cac  
Facsimile: 202.756.8087  
**Date: March 27, 2008**  
WDC99 1544942-1.064903.0022

**Please recognize our Customer No. 20277  
as our correspondence address.**